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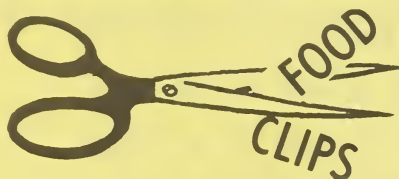
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Food and Home Notes

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Looks are deceiving, sometimes. A pound of spinach, before it is cooked, looks like enough to feed a crowd. Don't let it fool you -- it isn't. When cooked it will yield approximately enough for four, according to home economists at the U.S. Department of Agriculture.

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If you're trying to compare costs of fresh or frozen spinach -- multiply the cost of each by the factor. Frozen spinach at 25 cents per package costs about 10 cents for a $\frac{1}{2}$ cup serving and fresh spinach, at 50 cents a pound costs about 12 cents, -- frozen spinach then would be the best buy. As cost of food changes, of course, figures must be checked for comparisons.

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What is "parboiled" rice? A special steam-pressure process (before milling) forces vitamins and minerals from the hull, bran, and germ into the starching part of the grain.

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The term "converted" rice means that it is parboiled rice which is made by a patented process.

WINTER TRAVELS --in the Forest

If you're heading away from home for a long weekend or a vacation trip this winter -- and plan on visiting some of our big National Forests -- you should start with a travel map offered by the Forest Service, U.S. Department of Agriculture (in your region). Plan your trip carefully in order to enjoy it. You won't be alone in the National Forests because they are full of "winter people" who are traveling by skis, snowshoes, and snowmobiles.

But -- don't get lost -- use your map -- read a compass, and check the weather forecasts so you may avoid storms or anything that could mar your trip. Wind, temperature and moisture are three of your greatest concerns because each contributes to the loss of body heat. Warm clothing and tools to fix your snowmobile (if that's the way you'll travel) are important. Snowshoes are also good to carry along as survival gear.

Learn the distress signals -- three smokes, three blasts of a whistle, three shouts, three flashes of light -- three of just about anything will attract attention.

THE PROTEIN STORY

Why all the emphasis on protein? Every living cell of the human body contains it, but the body must be provided with resources to synthesize its own protein. It's needed to perform all vital functions such as replacing tissue, or producing enzymes and hormones -- and to remain healthy. The body's proteins are made up of 22 sub-units called amino acids -- 14 of which the body can adequately synthesize, leaving 8 that cannot be synthesized at a rate which would allow survival. Basically, the picture is simple -- without an adequate amount of amino acids (necessary protein) the human body will slowly begin to malfunction, become diseased, and eventually stop functioning altogether, according to a recent paper on "New and Unconventional Sources of Protein for Human Food" by Kathryn Kayser, ERS, U.S. Department of Agriculture.

All of the protein taken into the body is not actually used. Some is absorbed by the digestive tract and some is called the biological value (percentage of the absorbed protein). Therefore -- the protein in a food product that is actually available to our bodies -- is determined by the two factors which are called the NPU--net protein utilization. NPU of a food is largely determined by how closely the essential amino acids in its protein match the body's one utilizable pattern.

---New and Old

In the developing countries, according to figures from the United Nations, about 60 percent of the people are malnourished (lack of sufficient protein). Even in the developed countries segments of the population receive insufficient protein.

Some of the ways of providing more protein for human consumption include: making more naturally high-protein foods available, breeding to produce higher protein quality in locally grown foods, fortifying foods with missing amino acids, providing high-protein supplements, or creating new high-protein food products. Even these solutions--or so-called options -- are not answers in themselves because there are other problems such as consumer food acceptance and cost.

Cereal grains, the most important food in the diets of many people throughout the world, do not provide all the needed, complete protein. Fortification is one answer -- protein concentrates from natural sources such as fish, soybeans, cottonseed, and peanuts, or even with manufactured amino acids.

One of the successful fortification with protein concentrates is the soy-fortified wheat flour in Israel, another is the corn meal fortified with soy in Guatemala. Sometimes this method is too expensive, however. Baking and cooking processes often destroys amino acids. Extended storage may also reduce the effectiveness of the added amino acids. And in general, fortification (adding amino acids to a particular food product before it is sold to the public), some people who might not need improved protein quality will also receive it -- so that would be unnecessary expense as well as wasteful.

THE MANY WAYS --of Turkey

Did you know that turkey is one of our most versatile foods? Some families still stick with the traditional uses of turkey -- roast turkey and then cut down cold or prepared "left-overs" in the usual manner. But, today, partly because of the Agricultural Research Service, food technologist of the U.S. Department of Agriculture, consumers are now able to buy turkey steak, as well as raw chunks and ground turkey.

During the USDA tests on raw turkey products, it was also learned -- and many consumers are not aware of this -- that the juiciness of the meat depends largely on the cooking time. And, the more familiar turkey flavor associated with roast turkey develops only from a long, slow bake -- which also means that this turkey roast flavor is not usually present in the newer products. Demand, today, for processed turkey meat is increasing. One of the reasons is the economic factor and the cost per pound of protein. Ground turkey sells for less than almost any form of ground meat -- and can be used in almost as many ways. It also has a low fat content -- less than 2 percent for raw light meat and around 7 percent for dark meat. This compares very favorably with lean beef chunk.

Ground boneless turkey thighs are less red than ground beef but redder than ground veal or pork. Since consumers usually prefer a darker meat, the white turkey meat is not ground in with the red but rather sold separately.

The keeping quality of frozen ground turkey -- if good processing and storage techniques are used -- may be safely stored for at least 6 months without spoilage. As in any type of ground meat, however, it must be packaged properly because it does tend towards a higher bacteria count.